



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,593	05/08/2006	Philip Thonhauser	085523-0381114	1729

909 7590 02/18/2010  
PILLSBURY WINTHROP SHAW PITTMAN, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER
----------

DEO, DUY VU NGUYEN

ART UNIT	PAPER NUMBER
----------	--------------

1792

MAIL DATE	DELIVERY MODE
-----------	---------------

02/18/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/578,593	THONHAUSER, PHILIP	
	<b>Examiner</b>	<b>Art Unit</b>	
	Duy-Vu N. Deo	1792	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13-15 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15, 18-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over AT408987B (referred to as AT) and further in review of RU 2191163 C1 (referred to as RU).

AT describes a cleaning and disinfection composition and a method using thereof comprises water, potassium permanganates and sodium peroxodisulfate (claimed second oxidizing agent, whose oxidation potential exceeds that of a mixture containing 50 mol% manganese VII and 50 mol% manganese VI and above that of HO<sub>2</sub><sup>-</sup> to OH<sup>-</sup>) (abs.; page 6, line 25-30). Unlike claimed invention, AT doesn't describe a pH buffer substance such as primary and/or secondary alkali carbonate. RU describes a disinfection composition that includes potassium permanganate and sodium carbonate (claimed primary alkali carbonate) (abs.). One skilled in the art would find it obvious to add sodium carbonate in light of RU because he teaches the solution having such compound can be used for disinfection and sterilization of different objects (abs). Therefore, using known elements with no changes in their respective functions, in this case using composition having sodium carbonate for the disinfections purposes, would

Art Unit: 1792

be obvious and have yielded predictable results to one of ordinary skill in the art at the time of the invention was made.

3. Claims 9-11, 13-15, 18, 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over AT/RU as applied to claim 1 above, and further in view of admitted prior art.

Referring to claims 9-11, 14, 15, 22-29 AT teaches the pH is at least 11 (fig. 1). Furthermore, page 2 of the specification describes that color change (including colors of violet, yellow, and green) during the cleaning process is described in AT, wherein certain color is associated with certain species of the manganese compounds as they are reacted to form other species. Therefore, tracking the intensity of the light emitted in the such color wavelength ranges or visual evaluation of the amount of the substance external to the composition oxidized by the composition in order to monitor the cleaning process would be obvious to one skilled in the art because those colors indicate the cleaning of the organic impurities through the consumption of the oxidizing agent as suggested by AT (described in the specification, page 2).

The order of adding the components as claimed would have been obvious and within the knowledge of one skilled in the art at the time of the invention was made as long as it forms a cleaning solution with predictable results.

Referring to claim 11, it would be obvious to circulating the cleaning/disinfection solution through any components that needed to be clean.

Art Unit: 1792

4. Claims 6, 7, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over AT/RU as applied to claims 1, 9 above, and further in view of Wegner (US 2003/0151024).

Referring to claims 6, AT doesn't describe using sodium tripolyphosphate or sodium hexametaphosphate. Wegner teaches a disinfection composition comprising polyphosphates such as sodium polyphosphate (paragraphs 10, 25). It would have been obvious for one skilled in the art in light of Wegner to use polyphosphate such as sodium tripolyphosphate or sodium hexametaphosphate because Wegner teaches polyphosphate acts as a stabilizer and accelerator (paragraph 10). Also, using known elements in the art without changes in their respective functions would be obvious and yield predictable results to one skilled in the art.

Referring to claim 21, Wegner further teaches that the cleaning/disinfecting composition can have many applications including disinfecting plant (paragraphs 0041-0045). Therefore, using the solution to clean carbonators, fillers, or brewery would have been obvious to one skilled in the art. Using known technique or method without changes in their functions would have been obvious to one skilled in the art and would yield predictable results.

***Claim Rejections - 35 USC § 112***

5. Claims 9-11, 13-15, 18, 20, 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1792

It is not clear what the cleaning, disinfecting, and indicator agent (claim 9) and "the agent" (claim 20) are. The preamble of claim 1 appears to use "cleaning, disinfecting, and indicator agent" to describe the solution. It is not clear if these are intended to describe any specific components of the solution.

6. Claim 20 recites the limitation "the agent". There is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***

7. Claims 8 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8 and 13 are allowable because applied prior art doesn't describe the composition contains such claimed concentrations of each component as cited in claims 8 and 13.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1-11, 13-15, 18-29 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy-Vu N. Deo whose telephone number is 571-272-1462. The examiner can normally be reached on Mon-Fri.

Art Unit: 1792

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duy-Vu N Deo/  
Primary Examiner, Art Unit 1792

2/1/10